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| APPLICATION NO. | FII | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|-----------------------|------|---------------|----------------------|---------------------|------------------|--|--|
| 10/828,554 04/21/2004 | | Chung Hee Lee | IPS-0023 | IPS-0023 5437 | | | |
| 34610 | 7590 | 08/29/2006 | | EXAM | EXAMINER | | |
| FLESHNE P.O. BOX 2 | • | , LLP | YENKE, I | YENKE, BRIAN P | | | |
| CHANTILLY, VA 20153 | | | | ART UNIT | PAPER NUMBER | | |
| | | | | 2622 | | | |

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|--|--|--|--|--|--|
| Office Action Commons | 10/828,554 | LEE ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | BRIAN P. YENKE | 2622 | | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on | | | | | | | |
| | action is non-final. | | | | | | |
| | pplication is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4) Claim(s) 1-13 is/are pending in the application. | | | | | | | |
| • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5)⊠ Claim(s) <u>1-8</u> is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>9-13</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| | Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | · | | | | | | |
| 9) The specification is objected to by the Examine | • | | | | | | |
| 10)⊠ The drawing(s) filed on <u>21Apr04</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority under 35 U.S.C. § 119 | | 7.63.637.637.77.7.6 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign | nriority under 35 H.S.C. & 110(a) | -(d) or (f) | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | priority under 33 0.3.0. § 113(a) | -(u) or (r). | | | | | |
| 1. ☐ Certified copies of the priority documents | s have been received | | | | | | |
| 2. Certified copies of the priority documents | | on No | | | | | |
| | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| | * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| | | | | | | | |
| Attachment(s) | , – | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail Da | (PTO-413) te. | | | | | |
| B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) 🔲 Notice of Informal Pa | atent Application (PTO-152) | | | | | |
| Paper No(s)/Mail Date <u>25May06</u> . | 6) Other: | | | | | | |

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DETAILED ACTION

Drawings

The drawings are objected to because Fig 5 includes two elements with the description 1. "3rd Operation Unit", it appears (from the specification) that element 231 should be labeled "1st Operation Unit" to remedy this discrepancy. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/098142, Isono et al..

In considering claims 9-11 and 13,

As shown in Fig 2, the system includes a comparative section 102 which receives sensed values from sensors 101, where the section may include such a section upto the number of sensors (8 as shown), which receives the sensed signal via comparator 110 (meeting the 1st and 2nd comparing units), an inverter 111 (meeting the 1st and 2nd inverter units), a latch 112 (meeting the claimed 1st and 2nd latch units) which supplies the microprocessor 113 (in system controller 103) the information required for controlling convergence, where the convergence control signal is sent to convergence controller 105. As stated in the disclosure the comparators may receive the sensed signal via a resistor or an OP Amp (meeting the claimed amplifiers).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being obvious over applicant's cited WO 02/098142, Isono et al.

In considering claim 12,

Isono discloses a Q/R Latch, thus does not explicitly recite the use of a D-type flip flop for latching the output values. Since the use of a variety of latches are available, off the shelf items, the use of such is considered to be an obvious design choice to one of ordinary skill in the art in the field of endeavor. In the event the applicant disagrees with this assertion, the examiner requests the applicant to explain why D-type flip flops were not known/or were unable to be used in the field of endeavor.

Allowable Subject Matter

4. Claims 1-8 are allowed.

Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is

(703)305-HELP.

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An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

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The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (http://pair.uspto.gov) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

B.P.Y

25 August 2006

BRIAN P. YENKE